



BP OIL

ENVIRONMENTAL
PROTECTION

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BP Oil Company
Environmental Remediation Management
296 SW 41st Street
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March 14, 1997

Ms Eva Chu
Alameda County Health Care Services Agency
1131 Harbour Bay Parkway Room 250
Oakland, CA 94502-6577

RE: BP OIL FACILITY #11104
1716 Webster Street
Alameda, CA

Dear Ms Chu:

Attached please find our **GROUNDWATER MONITORING AND SAMPLING REPORT DATED JANUARY 2, 1997** for the above referenced facility. Plans for the following quarter include additional groundwater monitoring.

for sampling event in Nov 1996!

On a final note, please note that BP and Mobil Oil Corporation have an agreement to cooperate in the filing for reimbursement applications to the UST Cleanup Fund. If you become aware of any notices or proposals to withdraw a Letter of Commitment for this site, please give me a call to let me know immediately.

If you should have any questions regarding this site, I may be reached at (206) 251-0689.

Respectfully,

Scott T. Hooton
Environmental Resources Management
Corrective Action Manager

STH:sb msword\ERM11104

cc: Mr. Eddy So, CRWQCB, San Francisco Bay Region, 2101 Webster Street, Suite 500,
Oakland, CA 94612

TOSCO Northwest Co., 601 Union Street, Suite 2500, Seattle, WA 98101

Mr. Brady Nagle, Alisto, 1777 Oakland Blvd., Suite 200, Walnut Creek, CA 94596

Site File

GROUNDWATER MONITORING AND SAMPLING REPORT

**BP Oil Company Service Station No. 11104
1716 Webster Street
Alameda, California**

Project No. 10-155-06-002

JAN 16 1997

Prepared for:

**BP Oil Company
Environmental Resources Management
295 S.W. 41st Street
Building 13, Suite N
Renton, Washington**

**BP OIL CO.
ENVIRONMENTAL DEPT.
SOUTHWEST REGION OFFICE**

Prepared by:

**Alisto Engineering Group
1575 Treat Boulevard, Suite 201
Walnut Creek, California**

January 2, 1997



**Dale Swain
Project Manager**



**Al Sevilla, P.E.
Principal**



GROUNDWATER MONITORING AND SAMPLING REPORT

BP Oil Company Service Station No. 11104
1716 Webster Street
Alameda, California

Project No. 10-155-06-002

January 2, 1997

INTRODUCTION

This report presents the results and findings of the November 7, 1996 groundwater monitoring and sampling conducted by Alisto Engineering Group at BP Oil Company Service Station No. 11104, 1716 Webster Street, Alameda, California. A site vicinity map is shown on Figure 1.

FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region.

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well in reference to mean sea level. The survey data and groundwater elevation measurements collected to date are presented in Table 1.

Before sample collection, each well was purged of 3 casing volumes, while recording field readings of pH, temperature, electrical conductivity, and dissolved oxygen. Groundwater samples were collected for laboratory analysis by lowering a bottom-fill, disposable bailer to just below the water level in the well. The samples were transferred from the bailer into laboratory-supplied containers. The water sampling field survey forms are presented in Appendix A.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown on Figure 2. The results of groundwater analysis are shown on Figure 3. The laboratory report and chain of custody record are presented in Appendix B.



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11104
 1716 WEBSTER STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-155

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (mg/l)	DO (ppm)	LAB
MW-1	07/21/92	11.98	5.91	6.07	34000	7000	1700	2500	6900	---	---	---	---
MW-1	10/20/92	11.98	6.66	5.32	---	---	---	---	---	---	---	---	---
MW-1	03/05/93	11.98	4.56	7.42	---	---	---	---	---	---	---	---	---
MW-1	04/01/93	11.98	4.57	7.41	---	---	---	---	---	---	---	---	---
MW-1	07/09/93	11.98	5.25	6.73	77000	15000	1400	2100	7400	---	---	---	PACE
MW-1	(c) 07/09/93	11.98	---	---	79000	16000	1500	2200	7700	---	---	---	PACE
MW-1	10/08/93	11.98	6.01	5.97	42000	7100	270	2700	4700	---	---	---	PACE
MW-1	01/06/94	11.98	6.24	5.74	45000	12000	4300	3000	6700	---	---	---	PACE
MW-1	04/26/94	11.98	5.26	6.72	39000	6500	500	1800	1200	---	---	6.3	PACE
MW-1	07/25/94	11.98	5.60	6.38	38000	6300	240	1500	1100	---	---	1.7	PACE
MW-1	10/13/94	11.98	6.15	5.83	25000	6300	130	1300	830	---	---	2.3	PACE
MW-1	(c) 10/13/94	11.98	---	---	25000	7300	120	1200	740	---	---	---	PACE
MW-1	01/17/95	11.98	4.19	7.79	7800	3100	1100	460	850	---	---	7.9	ATI
MW-1	(c) 01/17/95	11.98	---	---	8400	3100	1200	470	1000	---	---	---	ATI
MW-1	03/31/95	11.98	4.48	7.50	37000	6700	6900	1200	4500	---	---	6.4	ATI
MW-1	(c) 03/31/95	11.98	---	---	40000	6900	7300	1300	5000	---	---	---	ATI
MW-1	05/01/95	11.98	4.39	7.59	---	---	---	---	---	---	---	---	---
MW-1	07/12/95	11.98	5.02	6.96	29000	7000	300	1500	3900	---	---	7.2	ATI
QC-1	(c) 07/12/95	---	---	---	29000	6600	380	1500	3900	---	---	---	ATI
MW-1	10/12/95	11.98	5.68	6.30	20000	3400	310	1100	3000	15000	---	6.3	ATI
QC-1	(c) 10/12/95	---	---	---	20000	3500	310	1100	3000	14000	---	---	ATI
MW-1	02/27/96	11.98	4.18	7.80	18000	4400	2900	860	2380	5500	472	7.9	SPL
MW-1	05/08/96	11.98	4.89	7.09	---	---	---	---	---	---	---	---	---
MW-1	05/09/96	11.98	---	---	14000	2300	1900	540	3340	2700	---	6.1	SPL
MW-1	08/09/96	11.98	5.13	6.85	---	---	---	---	---	---	---	---	---
MW-1	08/12/96	11.98	---	---	13000	2800	190	1300	3040	1800	---	7.1	SPL
MW-1	11/07/96	11.98	5.65	6.33	12000	2100	35	ND<25	ND<25	2100	---	7.2	SPL
MW-2	07/21/92	12.98	6.44	6.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---
MW-2	10/20/92	12.98	7.39	5.59	---	---	---	---	---	---	---	---	---
MW-2	03/05/93	12.98	4.91	8.07	---	---	---	---	---	---	---	---	---
MW-2	04/01/93	12.98	4.92	8.06	---	---	---	---	---	---	---	---	---
MW-2	07/09/93	12.98	5.60	7.38	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-2	10/08/93	12.98	6.50	6.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-1	(c) 10/08/93	12.98	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-2	01/06/94	12.98	6.25	6.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-2	04/26/94	12.98	5.73	7.25	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	7.5	PACE
MW-2	07/25/94	12.98	6.07	6.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.4	PACE
MW-2	10/13/94	12.98	6.80	6.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.4	PACE
MW-2	01/17/95	12.98	5.10	7.88	---	---	---	---	---	---	---	---	---
MW-2	03/31/95	12.98	4.69	8.29	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	7.3	ATI
MW-2	05/01/95	12.98	5.23	7.75	---	---	---	---	---	---	---	---	---
MW-2	07/12/95	12.98	5.40	7.58	---	---	---	---	---	---	---	---	---
MW-2	10/12/95	12.98	6.06	6.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	6.9	ATI
MW-2	02/27/96	12.98	4.66	8.32	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	412	8.7	SPL
MW-2	05/08/96	12.98	5.28	7.70	---	---	---	---	---	---	---	---	---
MW-2	08/09/96	12.98	5.59	7.39	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	7.8	SPL
MW-2	11/07/96	12.98	6.11	6.87	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 BP OIL COMPANY SERVICE STATION NO. 11104
 1716 WEBSTER STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-155

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (mg/l)	DO (ppm)	LAB
MW-3	(d) 07/21/92	13.38	7.07	6.31	ND<50	0.95	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---
MW-3	10/20/92	13.38	8.06	6.32	---	---	---	---	---	---	---	---	---
MW-3	03/05/93	13.38	5.16	8.22	---	---	---	---	---	---	---	---	---
MW-3	04/01/93	13.38	5.25	8.13	---	---	---	---	---	---	---	---	---
MW-3	07/09/93	13.38	5.80	7.58	ND<50	0.6	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-3	10/08/93	13.38	7.17	6.21	ND<50	0.6	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-3	01/06/94	13.38	6.94	6.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-3	04/26/94	13.38	6.18	7.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	3.1	PACE
MW-3	07/25/94	13.38	6.67	6.71	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.2	PACE
MW-3	10/13/94	13.38	7.43	5.95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.1	PACE
MW-3	01/17/95	13.38	5.07	8.31	---	---	---	---	---	---	---	---	---
MW-3	03/31/95	13.38	4.03	9.35	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	6.6	ATI
MW-3	05/01/95	13.38	4.94	8.44	---	---	---	---	---	---	---	---	---
MW-3	07/12/95	13.38	5.80	7.58	---	---	---	---	---	---	---	---	---
MW-3	10/12/95	13.38	6.64	6.74	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	6.4	ATI
MW-3	02/27/96	13.38	4.75	8.63	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	316	8.6	SPL
MW-3	05/08/96	13.38	5.86	7.52	---	---	---	---	---	---	---	---	---
MW-3	08/08/96	13.38	5.70	7.68	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	7.9	SPL
MW-3	11/07/96	13.38	6.21	7.17	---	---	---	---	---	---	---	---	---
MW-4	03/05/93	11.80	4.81	6.99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---
MW-4	04/01/93	11.80	4.80	7.00	---	---	---	---	---	---	---	---	---
MW-4	07/09/93	11.80	5.54	6.26	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-4	10/08/93	11.80	5.28	5.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-4	01/06/94	11.80	5.82	5.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-4	04/26/94	11.80	5.50	6.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	7.4	PACE
MW-4	07/25/94	11.80	5.83	5.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	7.2	PACE
MW-4	10/13/94	11.80	6.26	5.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	6.7	PACE
MW-4	01/17/95	11.80	4.19	7.61	---	---	---	---	---	---	---	---	---
MW-4	03/31/95	11.80	3.96	7.84	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	7.1	ATI
MW-4	05/01/95	11.80	4.49	7.31	---	---	---	---	---	---	---	---	---
MW-4	07/12/95	11.80	5.16	6.64	---	---	---	---	---	---	---	---	---
MW-4	10/12/95	11.80	5.80	6.00	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	6.9	ATI
MW-4	02/27/96	11.80	4.22	7.58	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	256	8.9	SPL
MW-4	05/08/96	11.80	5.00	6.80	---	---	---	---	---	---	---	---	---
MW-4	08/08/96	11.80	5.13	6.67	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	8.5	SPL
MW-4	11/07/96	11.80	5.65	6.15	---	---	---	---	---	---	---	---	---

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 BP OIL COMPANY SERVICE STATION NO. 11104
 1716 WEBSTER STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-155

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (mg/l)	DO (ppm)	LAB
MW-5	04/01/93	11.62	4.77	6.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---
MW-5	07/09/93	11.62	5.40	6.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-5	10/08/93	11.62	5.87	5.75	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-5	01/06/94	11.62	5.75	5.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-5	04/26/94	11.62	5.49	6.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	7.1	PACE
MW-5	07/25/94	11.62	5.69	5.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	6.6	PACE
MW-5	10/13/94	11.62	8.03	5.59	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	3.0	PACE
MW-5	01/17/95	11.62	4.74	6.88	---	---	---	---	---	---	---	---	---
MW-5	03/31/95	11.62	4.58	7.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	7.1	ATI
MW-5	05/01/95	11.62	4.79	6.83	---	---	---	---	---	---	---	---	---
MW-5	07/12/95	11.62	5.32	6.30	---	---	---	---	---	---	---	---	---
MW-5	10/12/95	11.62	5.70	5.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	6.7	ATI
MW-5	(e) 02/27/96	11.62	---	---	---	---	---	---	---	---	---	---	---
MW-5	05/08/96	11.62	4.91	6.71	---	---	---	---	---	---	---	---	---
MW-5	08/09/96	11.62	5.01	6.61	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	7.7	SPL
MW-5	11/07/96	11.62	5.54	6.08	---	---	---	---	---	---	---	---	---
RW-1	01/06/94	11.84	5.59	6.25	23000	3600	210	840	2100	---	---	---	PACE
QC-1	(c) 01/06/94	---	---	---	24000	3700	210	830	2000	---	---	---	PACE
RW-1	04/26/94	11.84	5.21	6.63	24000	3500	120	800	1700	---	---	6.4	PACE
QC-1	(c) 04/26/94	---	---	---	22000	3300	110	700	1700	---	---	---	PACE
RW-1	07/25/94	11.84	5.52	6.32	31000	4800	290	1100	1700	---	---	5.5	PACE
QC-1	(c) 07/25/94	---	---	---	28000	4400	240	960	1400	---	---	---	PACE
RW-1	10/13/94	11.84	6.05	5.79	20000	4200	46	990	440	---	---	6.8	PACE
RW-1	01/17/95	11.84	4.02	7.82	9600	1500	65	300	2700	---	---	7.7	ATI
RW-1	03/31/95	11.84	3.81	8.03	18000	1500	780	370	2000	---	---	7.8	ATI
RW-1	05/01/95	11.84	4.21	7.63	---	---	---	---	---	---	---	---	---
RW-1	07/12/95	11.84	4.93	6.91	22000	3700	150	950	2800	---	---	7.2	ATI
RW-1	10/12/95	11.84	5.46	6.38	30000	1600	1500	1700	8500	4300	---	7.0	ATI
RW-1	02/27/96	11.84	4.00	7.84	1800	30	24	41	440	52	194	7.7	SPL
QC-1	(c) 02/27/96	---	---	---	1600	30	23	38	420	50	---	---	SPL
RW-1	05/08/96	11.84	4.65	7.19	---	---	---	---	---	---	---	---	---
RW-1	05/09/96	11.84	---	---	3200	19	19	97	800	ND<50	---	7.1	SPL
QC-1	(c) 05/09/96	---	---	---	2900	15	15	78	700	ND<50	---	---	SPL
RW-1	08/09/96	11.84	4.96	6.88	---	---	---	---	---	---	---	---	---
RW-1	08/12/96	11.84	---	---	6900	210	270	390	1920	ND<100	---	7.9	SPL
QC-1	(c) 08/12/96	---	---	---	8200	270	330	450	2330	ND<100	---	---	SPL
RW-1	11/07/96	11.84	5.50	6.34	6100	320	45	ND<10	ND<10	430	---	6.9	SPL
QC-1	(c) 11/07/96	---	---	---	6800	360	45	ND<10	ND<10	500	---	---	SPL

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QC-2	(f) 07/09/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(f) 10/08/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(f) 01/06/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(f) 04/26/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(f) 07/25/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(f) 10/13/94	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
QC-2	(f) 01/17/95	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---	ATI
QC-2	(f) 03/31/95	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	ATI
QC-2	(f) 07/12/95	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	ATI
QC-2	(f) 10/12/95	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	---	---	ATI
QC-2	(f) 02/27/96	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	SPL
QC-2	(f) 05/09/96	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	---	---	SPL

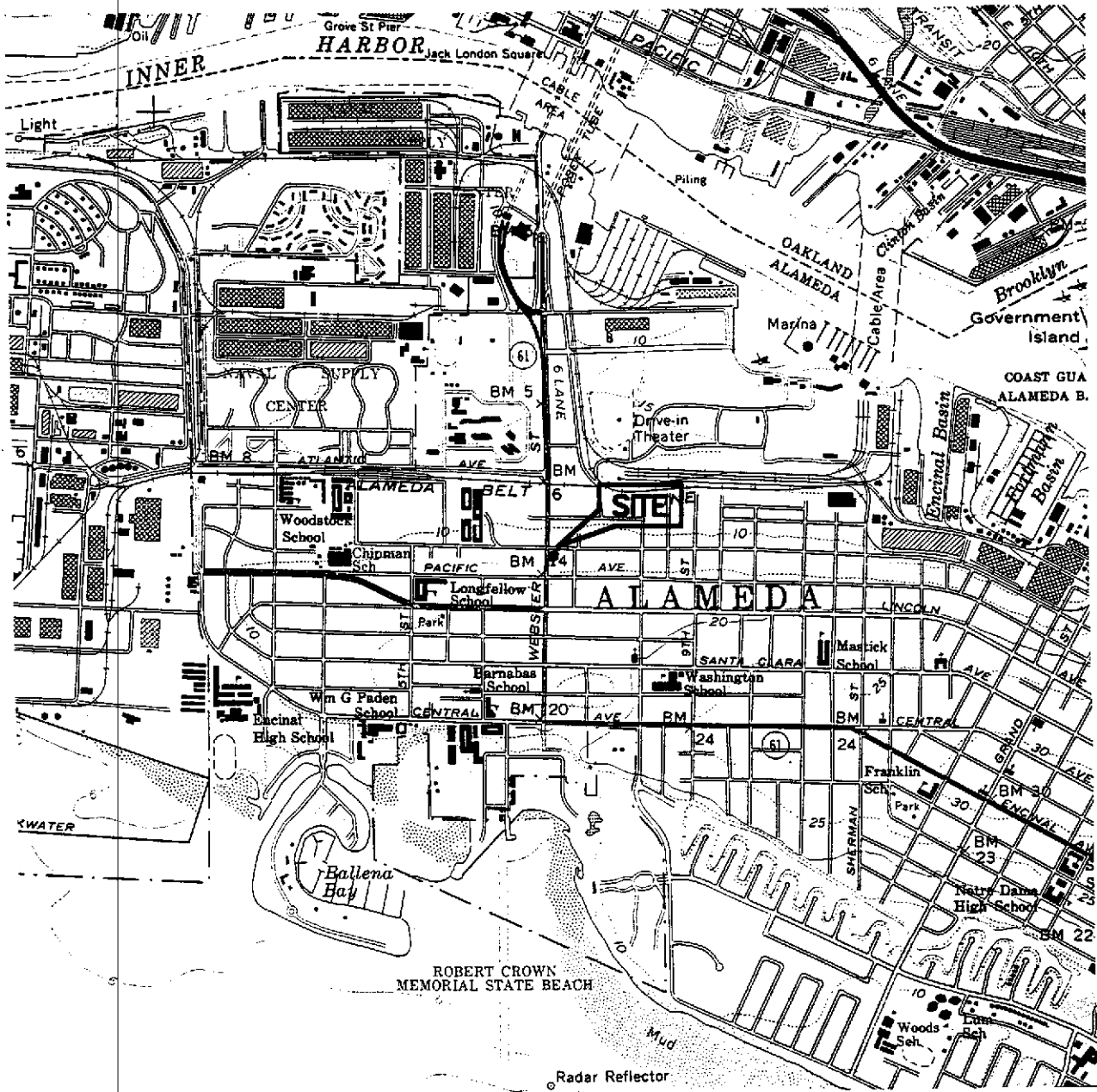
ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
TDS	Total dissolved solids
DO	Dissolved oxygen
ug/l	Micrograms per liter
mg/l	Milligrams per liter
ppm	Parts per million
---	Not applicable/analyzed/measured
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories

NOTES:

- (a) Top of casing elevations surveyed in reference to USGS benchmark (14.108 feet above mean sea level) at northwest corner of Webster Street and Pacific Avenue.
- (b) Groundwater elevations in feet above mean sea level.
- (c) Blind duplicate.
- (d) Sample also analyzed for cadmium, nickel, chromium, lead, and zinc. None were detected above the reported detection limit.
- (e) Well inaccessible.
- (f) Travel blank.

F:\01\10-155\155-6-2.WQ2



SOURCE:
 USGS MAP, OAKLAND WEST QUADRANGLE,
 CALIFORNIA, 7.5 MINUTE SERIES, 1959.
 PHOTOREVISED 1980.

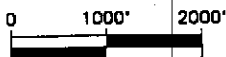


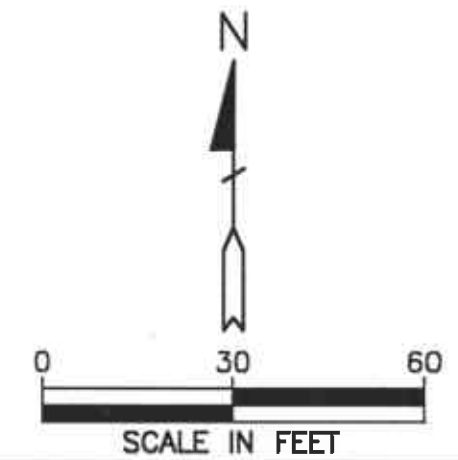
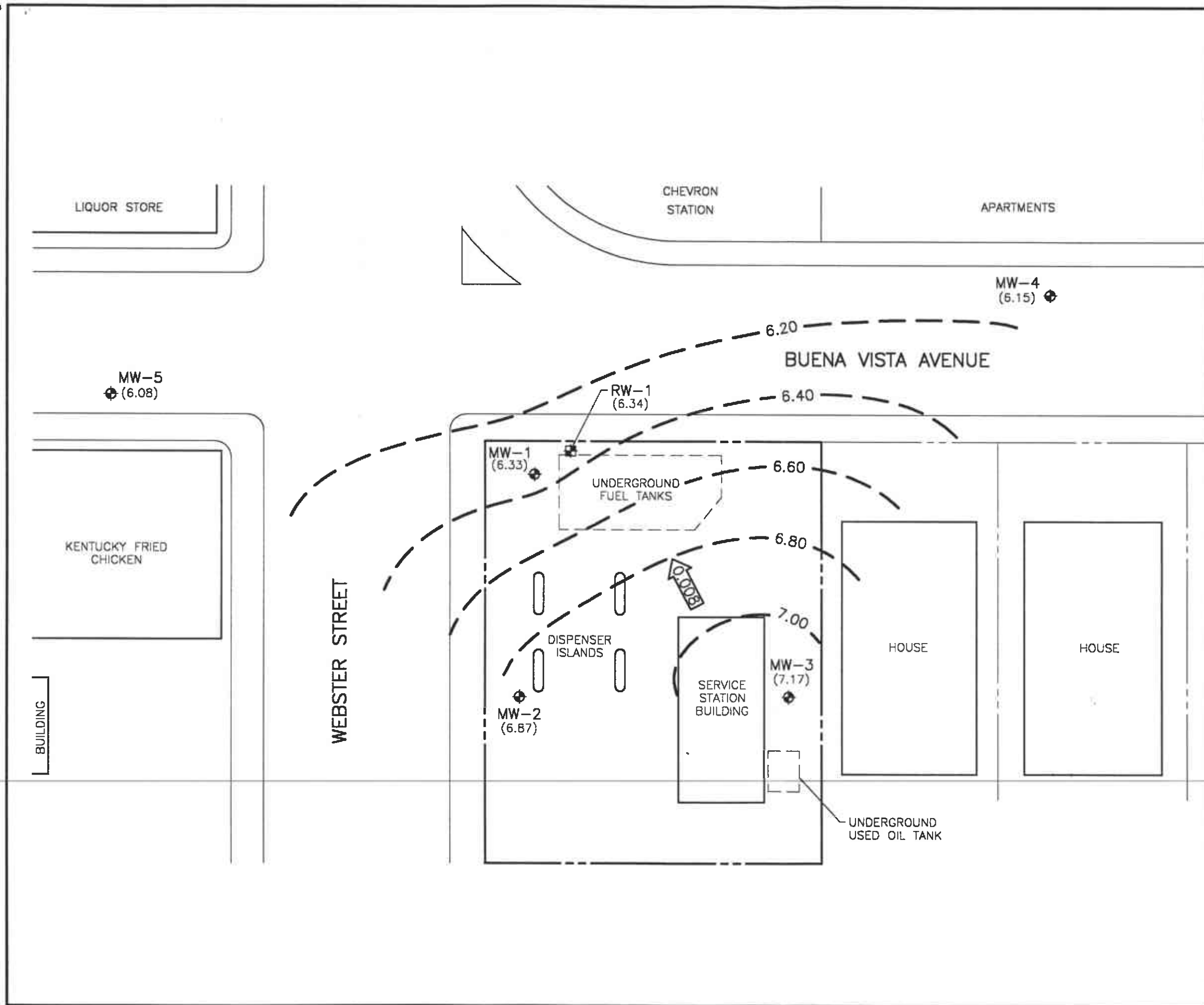
FIGURE 1

SITE VICINITY MAP

BP OIL SERVICE STATION NO. 11104
1716 WEBSTER STREET
ALAMEDA, CALIFORNIA
PROJECT NO. 10-155

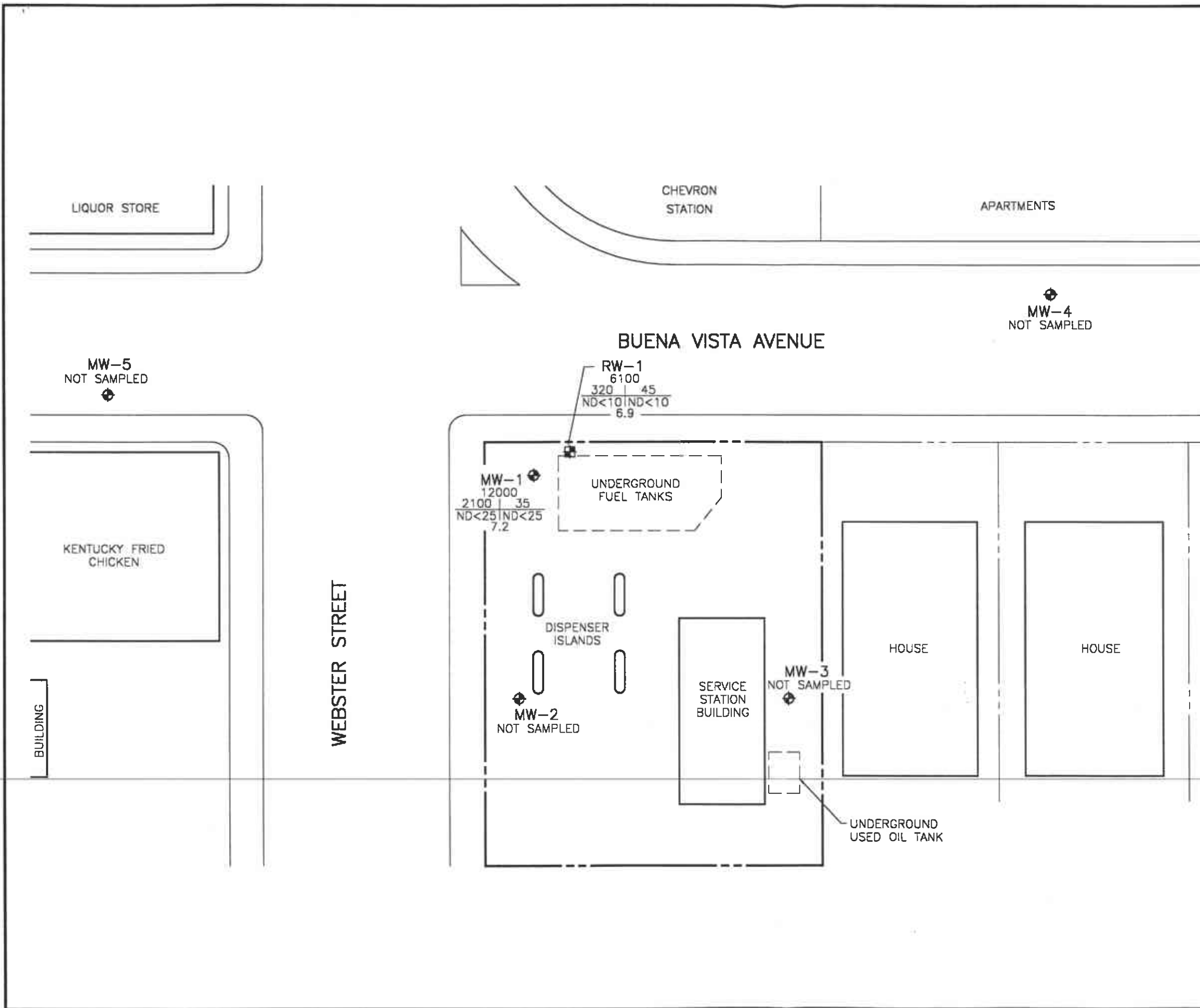


ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA



- LEGEND**
- ⊕ GROUNDWATER MONITORING WELL
 - ⊕ GROUNDWATER RECOVERY WELL
 - (6.34) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
 - 6.40 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL - 0.20 FOOT)
 - ← 0.008 → CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
NOVEMBER 7, 1996
 BP OIL SERVICE STATION NO. 11104
 1716 WEBSTER STREET
 ALAMEDA, CALIFORNIA
 PROJECT NO. 10-155



LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- ⊞ GROUNDWATER RECOVERY WELL
- TPH-G CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER, EXCEPT DISSOLVED OXYGEN, WHICH IS IN PARTS PER MILLION
- B | T
- E | X
- DO
- TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- DO DISSOLVED OXYGEN
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ←0.008 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER
NOVEMBER 7, 1996
 BP OIL SERVICE STATION NO. 11104
 1716 WEBSTER STREET
 ALAMEDA, CALIFORNIA
 PROJECT NO. 10-155

APPENDIX A
WATER SAMPLING FIELD SURVEY FORMS

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING

GROUP

1575 TREAT BOULEVARD, SUITE 201

WALNUT CREEK CA 94598 (510) 295-1650 FAX 295-1823

Project No. 10-155-06-002

Address 1716 Webster St.

Contract No. G797392

Station No. BP 11104

Date: 11/7/96

Day: M T W T F

City: Alameda

Sampler: UB

DEPTH TO GROUNDWATER SUMMARY

WELL ID	SAMPLE ID	WELL DIAM	TOTAL DEPTH	DEPTH TO WATER	PRODUCT THICKNESS	TIME MONITORED	COMMENTS:
MW-1	S-1	2"	16.88	5.65	Ø	1402	S
MW-2	N/S	↓	N/S	6.11	↓	1350	A-Feb
MW-3	↓	↓	↓	6.21	↓	1353	A-Feb
MW-4	↓	↓	↓	5.65	↓	1356	A-Feb
MW-5	↓	↓	↓	5.54	↓	1400	A-Feb
RW-1	S-2	6"	21.61	5.50	↓	1403	S QC-1 (S-3) From this well

FIELD INSTRUMENT CALIBRATION DATA

pH METER Jim 4.00 4 7.00 7 10.00 10 TEMPERATURE COMPENSATED Ⓚ N TIME 1340 WEATHER Clear
 D.O. METER Jim ZERO d.O. SOLUTION 0 BAROMETRIC PRESSURE 760 TEMP _____
 CONDUCTIVITY METER Jim 10,000 TURBIDITY METER _____ 5.0 NTU OTHER _____
 LEAK DETECTOR: _____ ALARM MODE X NON ALARM MODE _____

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.	<input type="checkbox"/> EPA 601 _____ <input checked="" type="checkbox"/> TPH-G/BTEX <u>HCC</u> <input type="checkbox"/> TPH Diesel _____ <input type="checkbox"/> TOG 5520 _____ TIME/SAMPLE ID
MW-1	5.65	2"	OK	Ø	Y <u>Ⓚ</u>	2	1415	68.9	7.14	637µs	6.7	
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						4		67.7	7.03	620µs		
$16.88 - 5.65 = 11.23 \times 1.16 = 1.80 \times 3 = 5.40$						5.5	1420	67.3	6.95	613µs	7.2	
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Baller(s) <u>1</u> <input type="checkbox"/> OSys Port												
Comments:												

Well ID	Depth to Water	Diam	Cap/Lock	Product Dept	Iridescence	Gal.	Time	Temp *F	pH	E.C.	D.O.	<input type="checkbox"/> EPA 601 _____ <input checked="" type="checkbox"/> TPH-G/BTEX <u>HCC</u> <input type="checkbox"/> TPH Diesel _____ <input type="checkbox"/> TOG 5520 _____ TIME/SAMPLE ID
RW-1	5.50	6"	OK	Ø	Y <u>Ⓚ</u>	25	1433	67.4	7.24	321µs	6.9	
Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge PurgeVol.						47		66.6	7.09	309µs		
$21.61 - 5.50 = 16.11 \times 1.47 = 23.68 \times 3 = 71.04$						71.5	1440	66.9	7.05	303µs	6.9	
Purge Method: <input checked="" type="checkbox"/> Surface Pump <input type="checkbox"/> Disp. Tube <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Disp. Baller(s) <u>1</u> <input type="checkbox"/> OSys Port												
Comments: <u>QC-1 (S-3) From this well</u>												

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 96-11-497

Approved for Release by:

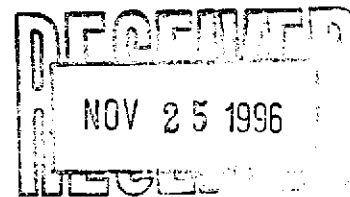


Ed Fry, Project Manager

11/18/96
Date:

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer



The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9611497-01

BP Oil Company
295 SW 41st St, Bldg 13, Ste N
Renton, WA 98055
ATTN: Scott Hooton

P.O.#
G797392 , COC#078137
DATE: 11/18/96

PROJECT: BP Oil #11104
SITE: Alameda, CA
SAMPLED BY: Alisto Engineering
SAMPLE ID: S-1

PROJECT NO: 10-155-6-2
MATRIX: WATER
DATE SAMPLED: 11/07/96
DATE RECEIVED: 11/09/96

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
MTBE	2100	250 P	µg/L
Benzene	2100	12.5 P	µg/L
Toluene	35	25 P	µg/L
Ethylbenzene	ND	25 P	µg/L
Total Xylene	ND	25 P	µg/L

Surrogate

% Recovery

1,4-Difluorobenzene

109

4-Bromofluorobenzene

96

METHOD 8020***

Analyzed by: HS

Date: 11/14/96

Total Petroleum Hydrocarbons-Gasoline

12

1.2 P

mg/L

Surrogate

% Recovery

1,4-Difluorobenzene

127

4-Bromofluorobenzene

109

CA LUFT - Gasoline


Analyzed by: VHZ

Date: 11/12/96 06:00:00

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
SPL California License # 1903


SPL, Inc., - Project Manager



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TEXAS 77054
 PHONE (713) 660-0901

Certificate of Analysis No. H9-9611497-03

BP Oil Company
 295 SW 41st St, Bldg 13, Ste N
 Renton, WA 98055
 ATTN: Scott Hooton

P.O.#
 G797392 , COC#078137
 DATE: 11/18/96

PROJECT: BP Oil #11104
 SITE: Alameda, CA
 SAMPLED BY: Alisto Engineering
 SAMPLE ID: S-3

PROJECT NO: 10-155-6-2
 MATRIX: WATER
 DATE SAMPLED: 11/07/96
 DATE RECEIVED: 11/09/96

PARAMETER	ANALYTICAL DATA		RESULTS	DETECTION LIMIT	UNITS
MTBE			500	100 P	µg/L
Benzene			360	5 P	µg/L
Toluene			45	10 P	µg/L
Ethylbenzene			ND	10 P	µg/L
Total Xylene			ND	10 P	µg/L
Surrogate		% Recovery			
1,4-Difluorobenzene			103		
4-Bromofluorobenzene			97		
METHOD 8020***					
Analyzed by: HS					
Date: 11/14/96					
Total Petroleum Hydrocarbons-Gasoline			6.8	0.25 P	mg/L
Surrogate		% Recovery			
1,4-Difluorobenzene			127		
4-Bromofluorobenzene			147		
CA LUFT - Gasoline					
Analyzed by: VHZ					
Date: 11/12/96 05:06:00					

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.
 SPL California License # 1903



 SPL, Inc., - Project Manager

QUALITY CONTROL
DOCUMENTATION



SURROGATE RECOVERY SUMMARY

11/18/96 09:43:16

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

AMOUNT CONC. RECOVERY LIMITS
ADDED MEASURED

CA LUFT - Gasoline BATCH#:HP_R961111100100
WORK ORDER: 9611497-01A CLIENT SAMPLE ID:S-1

1,4-Difluorobenzene	30	38.0000	127	50- 150
4-Bromofluorobenzene	30	32.8000	109	50- 150

CA LUFT - Gasoline BATCH#:HP_R961111100100
WORK ORDER: 9611497-02A CLIENT SAMPLE ID:S-2

1,4-Difluorobenzene	30	34.0000	113	50- 150
4-Bromofluorobenzene	30	40.0000	133	50- 150

CA LUFT - Gasoline BATCH#:HP_R961111100100
WORK ORDER: 9611497-03A CLIENT SAMPLE ID:S-3

1,4-Difluorobenzene	30	38.0000	127	50- 150
4-Bromofluorobenzene	30	44.0000	147	50- 150

Modified 8015 - Gasoline BATCH#:HP_R961111100100
WORK ORDER: Method Blank CLIENT SAMPLE ID:

4-Bromofluorobenzene	30	25	25.1	52- 152
1,4-Difluorobenzene	30	39	39.3	54- 137

Modified 8015 - Gasoline BATCH#:HP_R961111100100
WORK ORDER: Matrix Spike CLIENT SAMPLE ID:9611400-03C

4-Bromofluorobenzene	30	32	107	52- 152
1,4-Difluorobenzene	30	710	2370 <	54- 137

Modified 8015 - Gasoline BATCH#:HP_R961111100100
WORK ORDER: Matrix Spike Dup. CLIENT SAMPLE ID:9611400-03C

4-Bromofluorobenzene	30	31	103	52- 152
1,4-Difluorobenzene	30	790	2630 <	54- 137

METHOD 8020A *** BATCH#:HP_R961111121500
WORK ORDER: Method Blank CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	29	28.9	74- 131
4-Bromofluorobenzene	30	30	29.8	43- 135

METHOD 8020A *** BATCH#:HP_R961111121500
WORK ORDER: Matrix Spike CLIENT SAMPLE ID:9611398-04A

1,4-DIFLUOROBENZENE	30	31	103	70- 131
---------------------	----	----	-----	---------



SURROGATE RECOVERY SUMMARY

11/18/96 09:43:16

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054

PHONE (713) 660-0901

AMOUNT ADDED	CONC. MEASURED	RECOVERY	LIMITS
-----------------	-------------------	----------	--------

4-BROMOFLUOROBENZENE	30	34	113	43- 135
----------------------	----	----	-----	---------

METHOD 8020A ***

BATCH#:HP_R961111121500

WORK ORDER: Matrix Spike Dup.

CLIENT SAMPLE ID:9611398-04A

1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	36	120	43- 135

METHOD 8020***

BATCH#:VARE961113101800

WORK ORDER: 9611497-02A

CLIENT SAMPLE ID:S-2

1,4-Difluorobenzene	30	32.0000	107	70- 131
4-Bromofluorobenzene	30	29.0000	97	43- 135

METHOD 8020A ***

BATCH#:VARE961113101800

WORK ORDER: Method Blank

CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	28	27.5	74- 131
4-Bromofluorobenzene	30	28	28.2	43- 135

METHOD 8020A ***

BATCH#:VARE961113101800

WORK ORDER: LCS

CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	35	117	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

METHOD 8020A ***

BATCH#:VARE961113101800

WORK ORDER: Matrix Spike

CLIENT SAMPLE ID:9611441-12A

1,4-DIFLUOROBENZENE	30	31	103	70- 131
4-BROMOFLUOROBENZENE	30	30	100	43- 135

METHOD 8020A ***

BATCH#:VARE961113101800

WORK ORDER: Matrix Spike Dup.

CLIENT SAMPLE ID:9611441-12A

1,4-Difluorobenzene	30	33	110	70- 131
4-Bromofluorobenzene	30	31	103	43- 135

METHOD 8020***

BATCH#:VARE961114102200

WORK ORDER: 9611497-01A

CLIENT SAMPLE ID:S-1

1,4-Difluorobenzene	30	32.8000	109	70- 131
4-Bromofluorobenzene	30	28.8000	96	43- 135



AMOUNT CONC. RECOVERY
ADDED MEASURED

LIMITS

METHOD 8020*** BATCH#:VARE961114102200
WORK ORDER: 9611497-03A CLIENT SAMPLE ID:S-3

1,4-Difluorobenzene	30	31.0000	103	70- 131
4-Bromofluorobenzene	30	29.0000	97	43- 135

METHOD 8020A *** BATCH#:VARE961114102200
WORK ORDER: Method Blank CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	26	25.6	74- 131
4-Bromofluorobenzene	30	28	27.6	43- 135

METHOD 8020A *** BATCH#:VARE961114102200
WORK ORDER: LCS CLIENT SAMPLE ID:

1,4-Difluorobenzene	30	31	103	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

METHOD 8020A *** BATCH#:VARE961114102200
WORK ORDER: Matrix Spike CLIENT SAMPLE ID:9611408-07A

1,4-DIFLUOROBENZENE	30	30	100	70- 131
4-BROMOFLUOROBENZENE	30	30	100	43- 135

METHOD 8020A *** BATCH#:VARE961114102200
WORK ORDER: Matrix Spike Dup. CLIENT SAMPLE ID:9611408-07A

1,4-Difluorobenzene	30	32	107	70- 131
4-Bromofluorobenzene	30	30	100	43- 135

- < = Recovery outside of control limits
- * = Methods for Chemical Analysis of Water & Wastes, 1983, EPA
- ** = Standard Methods for Examination of Water & Wastewater, 17th
- *** = Test Methods for Evaluating Solid Waste, EPA SW846, 3rd



* SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Aqueous
Units: µg/L

Batch Id: VARE961114102200

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
MTBE	ND	50	41	82.0	63 - 120
Benzene	ND	50	40	80.0	62 - 121
Toluene	ND	50	42	84.0	66 - 136
EthylBenzene	ND	50	45	90.0	70 - 136
O Xylene	ND	50	46	92.0	74 - 134
M & P Xylene	ND	100	92	92.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
			MTBE	ND	20	15	75.0	17	85.0
BENZENE	14	20	31	85.0	32	90.0	5.71	25	39 - 150
TOLUENE	ND	20	17	85.0	17	85.0	0	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	18	90.0	0	38	61 - 128
O XYLENE	ND	20	18	90.0	18	90.0	0	29	40 - 130
M & P XYLENE	1.1	40	36	87.2	36	87.2	0	20	43 - 152

Analyst: HS

Sequence Date: 11/14/96

SPL ID of sample spiked: 9611408-07A

Sample File ID: E_K6380.TX0

Method Blank File ID:

Blank Spike File ID: E_K6374.TX0

Matrix Spike File ID: E_K6378.TX0

Matrix Spike Duplicate File ID: E_K6379.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = $[(<1> - <2>) / <3>] \times 100$

LCS % Recovery = $(<1> / <3>) \times 100$

Relative Percent Difference = $|(<4> - <5> | / [(<4> + <5>) \times 0.5] \times 100$

(**) = Source: SPL-Houston Historical Data (3rd Q '95)

(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9611408-05A 9611408-02A 9611408-06A 9611497-03A
9611497-01A 9611442-05A 9611441-15A 9611651-01A
9611651-04A 9611651-05A 9611651-03A 9611651-02A
9611651-06A 9611408-07A 9611654-07A 9611517-02A
9611517-01A



* SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Aqueous
Units: µg/L

Batch Id: VARE961113101800

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
MTBE	ND	50	45	90.0	63 - 120
Benzene	ND	50	46	92.0	62 - 121
Toluene	ND	50	48	96.0	66 - 136
EthylBenzene	ND	50	51	102	70 - 136
O Xylene	ND	50	50	100	74 - 134
M & P Xylene	ND	100	100	100	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
			MTBE	ND	20	14	70.0	13	65.0
BENZENE	ND	20	14	70.0	14	70.0	0	25	39 - 150
TOLUENE	ND	20	15	75.0	14	70.0	6.90	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	17	85.0	5.71	38	61 - 128
O XYLENE	ND	20	16	80.0	15	75.0	6.45	29	40 - 130
M & P XYLENE	ND	40	33	82.5	33	82.5	0	20	43 - 152

Analyst: HS

Sequence Date: 11/13/96

SPL ID of sample spiked: 9611441-12A

Sample File ID: E_K6350.TX0

Method Blank File ID:

Blank Spike File ID: E_K6346.TX0

Matrix Spike File ID: E_K6347.TX0

Matrix Spike Duplicate File ID: E_K6348.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = ((<1> - <2>) / <3>) x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = | (<4> - <5>) | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data (3rd Q '95)

(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9611197-01A 9611438-01A 9611654-01A 9611654-02A
 9611654-03A 9611654-04A 9611654-05A 9611442-08A
 9611442-07A 9611497-02A 9611442-06A 9611654-06A
 9611441-12A 9611549-02A 9611546-05A 9611106-01A



** SPL BATCH QUALITY CONTROL REPORT **
Modified 8015 - Gasoline

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Aqueous
Units: mg/L

Batch Id: HP_R961111100100

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Gasoline Petr. Hydrocarbon	ND	1.0	0.80	80.0	56 - 130

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
			GASOLINE PETR. HYDROCARBON	0.57	0.9	1.12		61.1	1.14

Analyst: VHZ

Sequence Date: 11/11/96

SPL ID of sample spiked: 9611400-03C

Sample File ID: RRK6410.TX0

Method Blank File ID:

Blank Spike File ID: RRK6403.TX0

Matrix Spike File ID: RRK6406.TX0

Matrix Spike Duplicate File ID: RRK6407.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = | (<4> - <5>) | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical data (3rd Q '95)

(***) = Source: SPL-Houston Historical Data (3rd Q '95)

SAMPLES IN BATCH(SPL ID):

9611400-03C 9611415-04A 9611442-04A 9611442-03A
 9611442-02A 9611442-01A 9611442-07A 9611442-08A
 9611501-03A 9611501-04A 9611497-02A 9611497-03A
 9611501-05A 9611497-01A 9611442-06A 9611442-05A

CHAIN OF CUSTODY
AND
SAMPLE RECEIPT CHECKLIST



9611497

9611497 11/96

CHAIN OF CUSTODY

No. 078137

Page 1 of 1

CONSULTANT'S NAME Alisto Engineering		ADDRESS 1575 Trent Blvd #201		CITY w.l.	STATE Ca	ZIP CODE 94598
BP SITE NUMBER 11104	BP CORNER ADDRESS/CITY Alameda			CONSULTANT PROJECT NUMBER 10-155-6-2		
CONSULTANT PROJECT MANAGER Brady Nale		PHONE NUMBER (510) 295-1650	FAX NUMBER 295-1823		CONSULTANT CONTRACT NUMBER 6797392	
BP CONTACT Scott Hooten	BP ADDRESS Texas Center		PHONE NUMBER		FAX NO.	
LAB CONTACT SPL	LABORATORY ADDRESS Texas		PHONE NUMBER		FAX NO.	
SAMPLED BY (Please Print Name) Larry Duenveride		SAMPLED BY (Signature) <i>[Signature]</i>		SHIPMENT DATE 11/08/96		SHIPMENT METHOD Fed Ex

TAT: 24 Hours 48 Hours 1 Week Standard 2 Weeks

ANALYSIS REQUIRED

AIRBILL NUMBER
9904779145

SAMPLE DESCRIPTION	COLLECTION DATE	MATRIX SOIL/WATER	CONTAINERS		PRESERVATIVE	PH	COMMENTS
	COLLECTION TIME		NO.	TYPE (VOL.)	LAB SAMPLE #		
S-1	11/2/96	w	3	HEC			
S-2	↓	↓	↓	↓			
S-3	↓	↓	↓	↓			

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	ADDITIONAL COMMENTS
<i>[Signature]</i>	11/7/96		<i>[Signature]</i>	11/08/96	3:40	
<i>[Signature]</i>	11/08/96	5:40	<i>[Signature]</i>	11/9/96	1000	3°C

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 11/9/96	Time: 1000
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SPL Sample ID:	9611497
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		<u>Yes</u>	<u>No</u>								
1	Chain-of-Custody (COC) form is present.	✓									
2	COC is properly completed.	✓									
3	If no, Non-Conformance Worksheet has been completed.										
4	Custody seals are present on the shipping container.	✓									
5	If yes, custody seals are intact.	✓									
6	All samples are tagged or labeled.	✓									
7	If no, Non-Conformance Worksheet has been completed.										
8	Sample containers arrived intact	✓									
9	Temperature of samples upon arrival:	3° C									
10	Method of sample delivery to SPL:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 2px;">SPL Delivery</td> <td style="width: 20%;"></td> </tr> <tr> <td style="padding: 2px;">Client Delivery</td> <td></td> </tr> <tr> <td style="padding: 2px;">FedEx Delivery (airbill #)</td> <td style="text-align: center;">9404779145</td> </tr> <tr> <td style="padding: 2px;">Other:</td> <td></td> </tr> </table>		SPL Delivery		Client Delivery		FedEx Delivery (airbill #)	9404779145	Other:	
SPL Delivery											
Client Delivery											
FedEx Delivery (airbill #)	9404779145										
Other:											
11	Method of sample disposal:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 2px;">SPL Disposal</td> <td style="width: 20%;"></td> </tr> <tr> <td style="padding: 2px;">HOLD</td> <td></td> </tr> <tr> <td style="padding: 2px;">Return to Client</td> <td></td> </tr> </table>		SPL Disposal		HOLD		Return to Client			
SPL Disposal											
HOLD											
Return to Client											

Name:	Date:
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**BP EXPLORATION & OIL, INC.
ENVIRONMENTAL REMEDIATION MANAGEMENT
DATA REVIEW CHECKLIST**

BP Site Number: 11104
 ERM Contact: 6797392
 Sampling Date: 11/2/96
 Matrix Description: groundwater
 Date Final Report Received: 11/25/96
 Laboratory & Location: SPL-TX

	Yes	No	NA
1. Is BP contract release number consistent with analytical report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Was report submitted within the specified timeframe?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does report agree with the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are units consistent with the given matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were any target analytes/compounds detected in blanks (i.e., trip or equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are duplicate water samples within <u>30</u> %?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are surrogates within limits using laboratory criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are MS/MSD acceptable using laboratory criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are LCS results acceptable using laboratory criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes: _____

Data Validation Completed by (print): Bill Howell
 (signature): Bill Howell
 Date: 12/23/96